

# Short description of Master Thesis: The Benefit of using Continuous Processing in Biopharmaceutical Manufacturing

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# The Benefit of using Continuous Processing in Biopharmaceutical Manufacturing

- The trend in industry has been to use batch processing.
- There are few products on the market already where fermentation or cell cultivation are running continuously in upstream, but downstream processes are still running batch wise .
- Now the industry and regulatory agencies have seen the benefit on running the processes in continuous mode.
- In this Master Thesis project several aspects can be described by comparing a traditional batch process with a new continuous process:
  - GMP aspects including quality by design aspects
  - Production costs
  - Facility design
  - Investment costs
- The pre-study will describe the main drivers for a continuous process, which will be used for narrowing the scope for the final Master Thesis.
- This Master Thesis will be performed together with NNE Pharmaplan, and hopefully we can find an industry partner, who can come with process information.
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